

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Sheridan (reg. 53,585) on 6/19/2009.

The application has been amended as follows:

In the claims:

1. (Currently Amended) A method, comprising:
 - receiving via a processor information over a communications network;
 - identifying a retriever's ~~input analysis~~ web browser capabilities;
 - retrieving customizable inheritable validation rules appropriate for the retriever's ~~input analysis~~ web browser capabilities from a hereditary rules library stored in a memory device; ~~and~~
 - selecting a validation scheme based on the retriever's web browser capabilities,
 - the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement;

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imbedding the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation; and

providing the requested web page for determination of ~~determining~~ computer data validity by applying the retrieved customizable inheritable validation rules to the information.

5. (Canceled)

7. (Currently Amended) A system, comprising:

means for receiving information over a communications network;

means for identifying a retriever's ~~input analysis~~ web browser capabilities;

means for retrieving customizable inheritable validation rules appropriate for the retriever's ~~input analysis~~ web browser capabilities from a hereditary rules library stored in a memory device; ~~and~~

means for selecting a validation scheme based on the retriever's web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement;

means for imbedding the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation; and

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means for providing the requested web page for determination of ~~determining~~ computer data validity by applying the retrieved customizable inheritable validation rules to the information.

11. (Canceled)

13. (Currently Amended) ~~Computer executable software code stored on a computer~~ A computer-readable medium storing a plurality of processing instructions, the code, comprising executable instructions by a processor for:

~~code for~~ receiving information over a communications network;

~~code for~~ identifying a retriever's ~~input analysis~~ web browser capabilities;

~~code for~~ retrieving customizable inheritable validation rules appropriate for retriever's ~~input analysis~~ web browser capabilities from a hereditary rules library stored in a memory device; ~~and~~

selecting a validation scheme based on the retriever's web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement;

imbedding the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation; and

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~~code for providing the requested web page for determination of determining~~
computer data validity by applying the retrieved customizable inheritable validation rules to the information.

14. (Currently Amended) The medium of claim 13, further comprising ~~code for~~
highlighting information determined to be invalid by the customizable inheritable validation rules.

17. (Canceled)

19. (Currently Amended) An apparatus, comprising:

a memory device having at least one region for storing executable program code;

and a processor, disposed in communication with the memory device, for executing the program code stored in the memory device, wherein the program code, further comprising:

code to receive information over a communications network;

code to identify a retriever's ~~input analysis~~ web browser capabilities;

code to retrieve customizable inheritable validation rules appropriate for retriever's ~~input analysis~~ web browser capabilities from a hereditary rules library stored in a memory device;

code to select a validation scheme based on the retriever's web browser capabilities, the validation scheme corresponding to a client-side validation if the web

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browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement;

code to imbed the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation; and

code to provide the requested web page for determination of
~~determine~~ computer data validity by applying the retrieved customizable inheritable validation rules to the information.

23. (Canceled)

25. (Currently Amended) A method, comprising:

identifying data types requiring validation;

identifying a retriever's ~~input analysis~~ web browser capabilities; ~~and~~

providing via a processor customizable inheritable validation rules appropriate for the retriever's ~~input analysis~~ web browser capabilities stored in a memory device for the associated data types from a hereditary rules library;

selecting a validation scheme based on the retriever's web browser capabilities,
the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement; and

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wherein providing customizable inheritable validation rules further comprises imbedding the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation.

28. (Canceled)

30. (Currently Amended) A system, comprising:

means for identifying data types requiring validation;

means for identifying a retriever's ~~input analysis~~ web browser capabilities; ~~and~~

means for providing customizable inheritable validation rules appropriate for the retriever's ~~input analysis~~ web browser capabilities stored in a memory device for the associated data types from a hereditary rules library;

means for selecting a validation scheme based on the retriever's web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement; and

wherein means for providing customizable inheritable validation rules further comprises means for imbedding the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation.

33. (Canceled)

35. (Currently Amended) ~~Computer-executable software code stored on a computer A~~

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computer-readable medium storing a plurality of processing instructions, ~~the code,~~
comprising executable instructions by a processor for:

~~code for~~ identifying data types requiring validation;

~~code for~~ identifying a retriever's ~~input analysis~~ web browser capabilities; ~~and~~

~~code for~~ providing customizable inheritable validation rules appropriate for the
retriever's ~~input analysis~~ web browser capabilities stored in a memory device for the associated
data types from a hereditary rules library;

selecting a validation scheme based on the retriever's web browser capabilities,
the validation scheme corresponding to a client-side validation if the web browser capabilities
include regex enablement and to a server-side validation if the web browser capabilities do not
include regex enablement; and

wherein providing customizable inheritable validation rules further comprises
imbedding the customizable inheritable validation rules in a requested web page associated with
a web page identifier when the validation scheme corresponds to the client-side validation.

38. (Canceled)

40. (Currently Amended) An apparatus, comprising:

a memory device having at least one region for storing executable program code;

and a processor, disposed in communication with the memory device, for executing
the program code stored in the memory device, wherein the program code, further comprising:

code to identify data types requiring validation;

code to identify a retriever's ~~input analysis~~ web browser capabilities;

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code to provide customizable inheritable validation rules

appropriate for the retriever's ~~input analysis~~ web browser capabilities stored in a memory device for the associated data types from a hereditary rules library;

code to select a validation scheme based on the retriever's web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement; and

wherein code to provide customizable inheritable validation rules further comprises code to imbed the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation.

43. (Canceled)

45. (Currently Amended) A method, comprising:

providing a hereditary rules library having an initial parent rule stored in a memory device;

identifying retriever ~~input analysis~~ web browser capabilities; ~~and~~

building via a processor customizable inheritable validation rules appropriate for a retriever's ~~input analysis~~ web browser capabilities by subclassing members of a hereditary rules library class hierarchy;

selecting a validation scheme based on retriever web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities

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include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement; and

imbedding the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation.

49. (Canceled)

51. (Currently Amended) A system, comprising:

means for providing a hereditary rules library having an initial parent rule stored in a memory device;

means for identifying retriever ~~input analysis~~ web browser capabilities; and

means for building customizable inheritable validation rules appropriate for a retriever's ~~input analysis~~ web browser capabilities by subclassing members of a hereditary rules library class hierarchy;

means for selecting a validation scheme based on retriever web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement; and

means for imbedding the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation.

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55. (Canceled)

57. (Currently Amended) ~~Computer executable software code stored on a computer~~ A computer-readable medium storing a plurality of instructions, the code, comprising executable instructions by a processor for:

~~code for~~ providing a hereditary rules library having an initial parent rule stored in a memory device;

~~code for~~ identifying retriever ~~input analysis~~ web browser capabilities; and

~~code for~~ building customizable inheritable validation rules appropriate for a retriever's ~~input analysis~~ web browser capabilities by subclassing members of a hereditary rules library class hierarchy;

selecting a validation scheme based on retriever web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement; and

imbedding the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation.

58. (Currently Amended) The medium of claim 57, further comprising ~~code for~~ storing subclassed customizable inheritable validation rules in the hereditary rules library.

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61. (Canceled)

63. (Currently Amended) An apparatus, comprising:

a memory device having at least one region for storing executable program code;

and

a processor, disposed in communication with the memory device, for executing

the program code stored in the memory device, wherein the program code, further comprising:

code to provide a hereditary rules library having an initial parent

rule stored in a memory device;

code to identify retriever ~~input analysis~~ web browser capabilities;

code to build customizable inheritable validation rules appropriate for a retriever's ~~input analysis~~ web browser capabilities by subclassing members of a hereditary rules library class hierarchy;

code to select a validation scheme based on retriever web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement; and

code to imbed the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation.

65. (Currently Amended) The ~~method~~ apparatus of claim 63, wherein the subclassed customizable inheritable validation rules inherit validation logic from a parent rule.

67. (Canceled)

69. (Currently Amended) A method, comprising:

marking data types for associated customizable inheritable validation rules from a hereditary rules library stored in a memory device;

identifying a retriever's ~~input analysis~~ web browser capabilities; ~~and~~

providing via a processor validation marked data types appropriate for the retriever's ~~input analysis~~ web browser capabilities;

selecting a validation scheme based on the retriever's web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement; and

imbedding the customizable inheritable validation rules for the validation marked data types in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation.

73. (Canceled)

75. (Currently Amended) A system, comprising:

means for marking data types for associated customizable inheritable validation rules from a hereditary rules library stored in a memory device;

means for identifying a retriever's ~~input analysis~~ web browser capabilities;

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means for providing validation marked data types appropriate for the retriever's ~~input analysis~~ web browser capabilities;

means for selecting a validation scheme based on the retriever's web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement; and

means for imbedding the customizable inheritable validation rules for the validation marked data types in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation.

79. (Canceled)

81. (Currently Amended) ~~Computer executable software code stored on a computer~~ A computer-readable medium storing a plurality of processing instructions, the code, comprising executable instructions by a processor for:

~~code for~~ marking data types for associated customizable inheritable validation rules from a hereditary rules library stored in a memory device;

~~code for~~ identifying a retriever's ~~input analysis~~ web browser capabilities;

~~code for~~ providing validation marked data types appropriate for the retriever's ~~input analysis~~ web browser capabilities;

selecting a validation scheme based on the retriever's web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser

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capabilities include regex enablement and to a server-side validation if the web browser

capabilities do not include regex enablement; and

imbedding the customizable inheritable validation rules for the

validation marked data types in a requested web page associated with a web page identifier

when the validation scheme corresponds to the client-side validation.

82. (Currently Amended) The medium of claim 81, further comprising ~~code~~
~~for~~ building forms with customizable inheritable validation rules associated with the
marked data types.

83. (Currently Amended) The medium of claim 81, further comprising ~~code~~
~~for~~ storing forms with customizable inheritable validation rules associated with the
marked data types.

84. (Currently Amended) The medium of claim 82, further comprising ~~code~~
~~for~~ providing forms with customizable inheritable validation rules associated with the
marked data types over a communications network.

85. (Canceled)

87. (Currently Amended) An apparatus, comprising:

a memory device having at least one region for storing executable program code;

and

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a processor, disposed in communication with the memory device, for executing the program code stored in the memory device, wherein the program code, further comprising:

code to mark data types for associated customizable inheritable validation rules from a hereditary rules library stored in a memory device;

code to identify a retriever's ~~input analysis~~ web browser capabilities;

code to provide validation marked data types appropriate for the retriever's ~~input analysis~~ web browser capabilities;

code to select a validation scheme based on the retriever's web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement; and

code to imbed the customizable inheritable validation rules for the validation marked data types in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation.

91. (Canceled)

93-104. (Canceled)

105. (Currently Amended) A method, comprising:

receiving via a processor information from a user over a communications network, including at least a web page request;

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identifying a retriever's web browser capabilities;
discerning a web page identifier associated with the web page request;
retrieving customizable inheritable validation rules from a hereditary rules library stored in a memory device based on the web page identifier;
selecting a validation scheme based on the retriever's web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement;
providing a navigation location directing the user to the web page, the navigation location selected based on the validation scheme;
for the client-side validation,
imbedding the customizable inheritable validation rules in a web page associated with the web page identifier;
receiving a plurality of inputs to the web page from the user; and
validating the inputs using the retrieved customizable inheritable validation rules in accordance with the validation scheme.

In the specification:

The specification has been amended as follows:

In line 18 of page 1, "Apple Macintosh" has been amended as –Apple MacintoshTM--.

In line 19 of page 1, "Windows" has been amended as –WindowsTM--.

In line 20 of page 2, "Internet Explorer" has been amended as –Internet ExplorerTM--.

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In line 20 of page 2, "Netscape Navigator" has been amended as –Netscape Navigator™--.

In line 2 of page 4, "www.w3.org/Protocols/Specs.html" has been amended as

--"www.w3.org/ Protocols/Specs.html"--.

In line 4 of page 5, "Javascript" has been amended as –JavaScript™--.

In line 2 of page 2, before "ROM," –a computer-readable medium such as—has been added.

In line 21 of page 11, "Java" has been changed to –Java™--.

In line 21 of page 11, "ActiveX" has been changed to –ActiveX™--.

In line 3 of page 18, "Visual Basic" has been changed to --Visual Basic™--.

Examiner's Statement of Reason(s) for Allowance

2. Claims 1-4, 6-10, 12-16, 18-22, 24-27, 29-32, 34-37, 39-42, 44-48, 50-54, 56-60, 62-66, 68-72, 74-78, 80-84, 86-90, 92, and 105 (renumbered as 1-77) are allowed.

3. The following is an examiner's statement of reason s for allowance:

The cited prior arts of record, taken alone or in combination, fail to teach or fairly suggest at least: selecting a validation scheme based on the retriever's web browser capabilities, the validation scheme corresponding to a client-side validation if the web browser capabilities include regex enablement and to a server-side validation if the web browser capabilities do not include regex enablement; imbedding the customizable inheritable validation rules in a requested web page associated with a web page identifier when the validation scheme corresponds to the client-side validation as recited in the independent claims.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to INSUN KANG whose telephone number is (571)272-3724. The examiner can normally be reached on M-R 7:30-6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis A. Bullock, Jr. can be reached on 571-272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Insun Kang/
Primary Examiner, Art Unit 2193